Appln. No. 10/734,520

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II. Remarks

In response to the Office Action mailed April 29, 2005, kindly enter the foregoing amendment and consider the following remarks. Pursuant to 37 CFR §1.112, Applicant(s) request reconsideration of each and every ground of rejection set forth in the Office Action.

The Office Action and the references cited therein have been carefully considered. In this Amendment, claims 4 and 14 have been canceled, and claims 1, 5, 11, 15, 23 and 24 have been amended. Thus claims 1-3, 5-13, and 15-30 are pending and are at issue herein. In view of these amendments and the following remarks, favorable reconsideration of this application is requested.

ALLOWABLE SUBJECT MATTER

The Applicants would like to thank the Examiner for indicating allowable subject matter. Specifically, the Examiner noted on page 5 of the Office Action that claims 4, 5, 14, 15 and 18 are allowable if rewritten in independent form, and that claims 23-30 would be allowable if amended to overcome the rejections under 35 U.S.C. § 112.

Accordingly, the Applicants have amended claim 1 to incorporate the subject matter of claim 4, and further have amended claim 11 into independent format and to include the subject matter of claim 14. Claims 23 and 24 have also been amended as further discussed below. For these reasons, favorable consideration of all the claims is respectfully requested.

CLAIM REJECTIONS UNDER 35 USC §112

Claims 23-30 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner notes it is unclear how the pressure is determined, i.e. whether a pressure sensor is used or determined knowing the mass and conditions of gas entering the compressor and the compressor characteristics.

The Applicants have amended claim 23 to remove reference to the pressure

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of the air exiting the compressor. As recited in paragraph 35 of the specification, based on the sensed temperature, the desired temperature change, and the current compressor speed (i.e. air mass flow rate), a controller can utilize the electric motor 76 to increase the compressor speed to attain a requisite air mass flow rate. As additionally described in paragraph 37, the capacity of the compressor may also be adjusted by controlling the pressure ratio of the system, which can simply be effectuated through control of an exhaust valve to regulate the pressure of the air outputted from the compressor. As suggested by the Examiner, since ambient air is used at the Intake and the compressor characteristics are known, the compression ratio can be adjusted simply by controlling the exhaust valve or port, although pressure sensors could be used.

Claim 24 has also been amended to correct the antecedent bas's issue noted by the Examiner.

For all these reasons, favorable consideration of claims 23-30 s respectfully requested.

CLAIM REJECTIONS UNDER 35 USC §102 and 103

Claims 1-3 stand rejected under 35 U.S.C. §102(a) as being anticipated by the Lents reference, and also as being anticipated by the Alboroudi reference. Claims 1, 2 and 6-10 stand rejected under 35 U.S.C. § 102(b) is being anticipated by the Edwards reference. Claims 1-3, 11-13, 16, 17, 19, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Weil reference in view of the Nikai reference. Claim 20 stands rejected under 25 U.S.C. § 103(a) as being unpatentable over the Weil and Nikai references in further view of the Leo reference.

As noted above, claim 1 has been amended to include the subject matter of dependant claim 4, indicated as allowable by the Examiner. For this reason, favorable consideration of independent claim 1, as well as all of its dependent claims, is respectfully requested.

The Applicants also note that claim 11 has been amended to independent format, and to include the subject matter of dependent claim 14, indicated as allowable by the Examiner. For these reasons, the Applicant's request favorable

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consideration of independent claim 11 and as well as all of its dependent claims.

CONCLUSION

In view of the preceding amendments and remarks, the Applicants respectfully submit that the specification is in order and that all of the claims are now in condition for allowance. If the Examiner believes that personal contact would be advantageous to the disposition of this case, the Applicants respectfully request that the Examiner contact the Attorney of the Applicants at the earliest convenience of the Examiner.

Respectfully submitted

Attomey/Agent for Applicant